Summary of Publications (last updated June 1997)

Books

1 Topics in Parallel Computing in Mathematical Programming (with P.M. Pardalos and J.B. Rosen). *Science Press*, D.Z. Du (Editor). 1992.

Refereed Journal Publications

2 Protein Structure and Energy Landscape Dependence on Sequence using a Continuous Energy Function (with K.A. Dill and J.B. Rosen). *Journal of Computational Biology*, 1997 (in press).

3 Molecular structure prediction by global optimization (with K.A. Dill and J.B. Rosen). *Developments in Global Optimization*, 217-234, I.M. Bomze et al. (Eds), 1997.

4 CGU: An algorithm for molecular structure prediction (with K.A. Dill and J.B. Rosen). *IMA Volumes in Mathematics and its Applications: Large Scale Optimization with Applications, Part III: Molecular Structure and Optimization,* 1-22, L.T. Biegler et al. (Eds), 1997.

5 Molecular structure determination by convex global underestimation of local energy minima (with J.B. Rosen and V.H. Walke). *Dimacs Series in Discrete Mathematics and Theoretical Computer Science* 23:181-198, 1995.

6 A quadratic assignment formulation of the molecular conformation problem (with J.B. Rosen). *Journal of Global Optimization* 4:229-241, 1994.

7 A computational comparison of two methods for constrained global optimization (with J.B. Rosen and M. van Vliet). *Journal of Global Optimization* 5:325-332, 1994.

8 Sufficient conditions for solving linearly constrained separable concave global minimization problems (with J.B. Rosen). *Journal of Global Optimization* 3:79-94, 1993.

9 A parallel stochastic method for solving linearly constrained concave global minimization problems (with J.B. Rosen and M. van Vliet). *Journal of Global Optimization* 2:243-258, 1992.

10 Efficient computation of extreme points of convex hulls in $\mathbf{R}d1$ (with J.B. Rosen and G.-L. Xue). *Advances in Optimization and Parallel Computing*, P.M. Pardalos (Editor). Elsevier Science Publishers B.V., pp. 267-292, 1992.

11 Global optimization of quadratic fractional programs (with P.M. Pardalos). *Journal of Global Optimization* 1(2):173-182, 1991.

12 A parallel algorithm for partially separable non-convex global minimization: Linear Con-

straints (with J.B. Rosen). *Annals of Operations Research* 25:101-118, 1990.

13 Guaranteed e-approximate solution for indefinite quadratic global minimization (with J.B. Rosen). *Naval Research Logistics* 37:499-514, 1990.

14 A global optimization approach for solving the maximum clique problem (with P.M. Pardalos). *International Journal of Computer Mathematics* 33:209-216, 1990.

15 Anomalous acceleration in parallel multiple-cost-row linear programming (with J.B. Rosen). *ORSA Journal on Computing* 1(4):247-251, 1989.

16 A parallel algorithm for constrained concave quadratic global minimization (with J.B. Rosen). *Mathematical Programming* 42:421-448, 1988.

17 A parallel algorithm for solving the linear complementarity problem (with J.B. Rosen). Special Volume on Parallel Optimization on Novel Computer Architectures. *Annals of Operations Research* 14:77-104, 1988.

Refereed Proceedings

18 Protein Structure Prediction and Potential Energy Landscape Analysis using Continuous Global Minimization (with K.A. Dill and J.B. Rosen). *Proceedings of the First Annual International Conference on Computational Molecular Biology*, 109-117, 1997.

19 Multitasking solution of mathematical programming problems (with J.B. Rosen). *Science and Engineering on Cray Supercomputers: Proceedings of the Third International Symposium*, Minneapolis, Minnesota, September 1987.

Unpublished Technical Reports

20 Sufficient conditions for linearly constrained concave global minimization: Computational implementation (with J.B. Rosen). Army High Performance Computing Research Center Preprint 91-66. University of Minnesota, Minneapolis, MN, August 1991.

21 A separable quadratic global minimization formulation of the linear complementarity problem. Computer Science Department Report. United States Naval Academy, Annapolis, MD, November 1989.

22 Finding the extreme points of a convex hull in parallel (with J.B. Rosen). Computer Science Department Report. United States Naval Academy, Annapolis, MD, May 1989.

23 A characterization of the global minimizer of a linearly constrained indefinite quadratic minimization problem. Computer Science Department Report. United States Naval Academy, Annapolis, MD, January 1989.

24 Fast approximate solution of large-scale constrained global optimization problems (with

E.L. Stuart and J.B. Rosen). Computer Science Department Preprint 88-9. University of Minnesota, Minneapolis, MN, January 1988.

25 A parallel algorithm for constrained concave quadratic global minimization: Computational aspects (with J.B. Rosen). University of Minnesota Supercomputer Institute Preprint UMSI 87/101. University of Minnesota, Minneapolis, MN, December 1987.